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SANTA CRUZ BIOTECHNOLOGY, INC.

RGS7 (h2): 293T Lysate: sc-173973

BACKGROUND

Heterotrimeric G proteins function to relay information from cell surface receptors to various intracellular effectors. G proteins comprise α, β and γ subunits, and following activation the a subunit binds GTP and dissociates from the $\beta\gamma$ complex. A large group of proteins have been identified as GTPase-activating proteins (GAPs), including the RGS (regulator of G protein signaling) family, which serve to deactivate specific G_α isoforms by increasing the rate at which they convert GTP to GDP. A subfamily of RGS proteins expressed in the central nervous system contain, in addition to the highly conserved RGS domain, a characteristic GGL domain, or G protein γ subunit-like domain, which mediates binding to $G_{\beta5}$ subunits. This subfamily, which includes RGS6, RGS7, RGS9 and RGS11, associates with $G_{\beta5}$ to form active GAP complexes that are predominantly localized to the cytosol. RGS/β5 complexes preferentially target $G_{\alpha\,o}$ subunit for hydrolysis and inhibit $G_{\beta1\gamma2}$-mediated activation of phospholipase C.

REFERENCES

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7. Snow, B.E., Betts, L., Mangion, J., Sondek, J. and Siderovski, D.P. 1999. Fidelity of G protein β-subunit association by the G protein γ-subunit-like domains of RGS6, RGS7, and RGS11. Proc. Natl. Acad. Sci. USA 96: 6489-6494.

CHROMOSOMAL LOCATION

Genetic locus: RGS7 (human) mapping to 1q43.

PRODUCT

RGS7 (h2): 293T Lysate represents a lysate of human RGS7 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

RGS7 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive RGS7 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.